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REMARKS

Claims 1-27 are pending in this application. Reconsideration and withdrawal of the restriction requirement is respectfully requested. The claims of the present application have been subjected to a Restriction Requirement under 35 U.S.C. §121 by the Examiner in this case.

The Examiner suggests that the claims should be grouped into three inventive groups as follows:

Group I, claims 1-3 and 7-27, drawn to a computer implemented method and system for transforming a plurality of chromatographic elution profiles, grouped by basis of intersecting detector response values, classified in class 702, subclass 32.

Group II, claim 4, drawn to method for estimating the number of different single nucleotide polymorphisms (SNPs) in a plurality of same length DNA fragments classified in class 702, subclass 12.

Group III, claims 5 and 6, drawn to a method for detecting the presence of a previously unknown SNPs in a test DNA fragment, classified in class 702, subclass 12.

The Examiner has suggested that groups I-III are distinct method each from the other. It is suggested that groups II and III have different objectives, different uses, different reagents and

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different steps in methodology. Therefore the methods are suggested to be distinct over one and other.

The Examiner further suggests that the application contains claims directed to patentably distinct species of the claimed invention. Species A is considered to be a grouping, by the basis of intersecting profiles, claims 9, 10, 15-17, 21, 22, 25, and 26. Species B is considered to be a grouping, by the basis of clustering claims 11, 12, 17, 18, 23, 24, and 27.

Applicants are required under 35 U.S.C. 121 to elect one inventive group and a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. The Examiner has acknowledged claims 1-3, 7, 8, 13, 14, 19, 20 and 25 to be generic. Applicants respectfully traverse this restriction requirement.

MPEP §803 is quite clear; for a proper restriction requirement, it must be shown (1) that the inventions are independent or distinct AND (2) that there would be a serious burden on the Examiner if the restriction is not required. MPEP 802.01 defines "distinct" to mean that the "two or more subjects as disclosed are related, for example, as combination and part (subcombination) thereof, process and apparatus for its practice, process and product made there, etc., but are capable of separate

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manufacture, use, or sale, as claimed, AND ARE PATENTABLE (novel and unobvious) OVER EACH OTHER."

As acknowledged by the Examiner, all of the identified claims relate to the same concept of analysis of elution profile data obtained from liquid chromatographic separation of DNA. The methods allow for sorting of the profiles on the basis of shape, distribution profiles, unknown polymorphisms and distinct groupings. The analysis results of the profiles may be sorted in different ways. The ability to sort data into individual categories should not render the invention subject to restriction. Thus, Applicants respectfully disagree with the Examiner's suggestion that the groups are distinct as being novel and unobvious over each other as required by MPEP § 802.01.

Further, a search of literature relating to analysis of elution profile data obtained from liquid chromatographic separation of DNA, would clearly reveal art relating to all of these Groups. Thus, the search including all three Groups of this application would not be overly burdensome to the Examiner. Accordingly, the instant Restriction Requirement meets neither of the criteria as set forth by MPEP \$\$803 to be proper. Reconsideration and withdrawal of this Restriction Requirement is therefore respectfully requested.

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However, in an earnest effort to be completely responsive, Applicants have elected to prosecute Group I, claims 1-3 and 7-27 and further elected to prosecute species A, grouping by basis of intersecting profiles, with traverse. In the event that the restriction requirement is maintained by the Examiner, the Applicants retain the right to file divisional applications to prosecute the non-elected subject matter set forth in this application. Applicants believe that this response satisfies the requirements of this Restriction Requirement.

Respectfully submitted,

Jan confecto

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Date: <u>June 16, 2003</u>

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